

Training Module: Overhead Electrical Hazards

Objective: To be able to prevent contact with overhead power supply lines.

Trainer's Note: Discuss the hazards of overhead power lines. Suggest methods for avoiding contact with power lines. Address questions concerning power supply lines. Invite a representative from the local power company.

Background

Using electrical equipment on farms saves time and labor. If large agricultural equipment, such as portable elevators, augers, irrigation pipes, grain trucks and harvesting machinery, come in contact with overhead power lines, the operator will be electrocuted resulting in death or disabilities. Irrigation pipes only need to be near an overhead power line to kill the handler.

Employees should check for overhead power lines before:

- Pulling or installing pump casing and pipe.
- Raising or lowering farm machinery.
- Moving irrigation equipment.
- Pruning Trees.
- Constructing buildings.

Remember:

- The absence of protective insulation from most overhead power lines making any contact is dangerous.
- Nonmetallic materials (lumber, tree limbs, tires, ropes, straw and hay) can conduct electricity
- Electricity always seeks the easiest and shortest path to ground. This includes going **through** people.
- Do not touch power lines.
- Unqualified workers, vehicles and machinery must stay at least ten feet away from unguarded equipment.
- Hay stored under power lines increases the chance that a loader will contact the power lines.
- Stay away from fallen overhead wires. Notify the power company immediately.
- Ladders should not be used near overhead power lines.
- Plan a travel route for equipment that avoids overhead power lines.
- The ground level should not be raised underneath overhead power lines.

Review The Following Points

- Most overhead power lines have no protective insulation. Any contact is dangerous.
- Electricity always seeks the easiest and shortest path to the ground.
- Never touch fallen overhead wires. Notify the power company immediately.
- Employees should check for overhead power lines before attempting any work activities.
- Plan your route of travel to avoid power lines.

True or False Answer Key

1. T, 2. F, 3. T, 4. T, 5. T

Overhead Electrical Hazards Quiz

True or False

Name _____

- | | | |
|---|---|---|
| 1. Never touch power lines. | T | F |
| 2. Nonmetallic materials such; as lumber, tree limbs, tires, ropes, straw, and hay, do not conduct electricity. | T | F |
| 3. Irrigation pipes or other machinery do not need to touch an overhead power line for it to be lethal. | T | F |
| 4. Notify the power company immediately should a problem or concern arise. | T | F |
| 5. Electricity seeks the easiest and shortest path to the ground. | T | F |